

Appl. No. : 10/606,001
Filed : June 24, 2003

AMENDMENTS TO THE CLAIMS

The following listing of claims will replace all prior versions and listings of claims in the application:

Claims 1-3 (canceled)

4. (Currently amended) A precursor film stack for use in the production of MEMS devices, the precursor film stack comprising:

- a carrier substrate;
- an optical compensation layer formed on the carrier substrate, the optical compensation layer comprising a material of a finite extinction coefficient;
- a first layer formed on the ~~carrier-substrate~~ optical compensation layer;
- a second layer of an insulator material formed on the first layer; and
- a third layer of a sacrificial material formed on the second layer.

5. (Original) The stack of claim 4, wherein the first, the second and the third layers are formed using a deposition technique.

6. (Currently amended) The stack of claim 4, wherein the first layer is of a conductive material is selected from the group ~~consisting of~~ comprising a single metal, a conductive oxide, a fluoride, a silicide, and a conductive polymer.

7. (Currently amended) The stack of claim 4, wherein the insulator material is selected from the group ~~consisting of~~ comprising an oxide, a polymer, a fluoride, a ceramic and a nitride.

8. (Original) The stack of claim 4, wherein the sacrificial material is etchable using a Xenon difluoride gas.

9. (Currently amended) The stack of claim 4, wherein the sacrificial material is selected from the group ~~consisting of~~ comprising silicon, molybdenum, and tungsten.

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10. (Canceled)

11. (Currently amended) The stack of claim [[10]] 4, wherein the optical compensation layer ~~includes materials selected from the group consisting of~~ comprises a material comprising at least one of Zirconia, Hafnia, an oxide, a nitride, and a fluoride fluoride.

12. (Currently amended) The stack of claim 4, wherein the first layer comprises a plurality of sublayers, at least some of the sublayers ~~being~~ comprising a conductive material.

13. (Original) The stack of claim 12, wherein the sublayer furthest from the carrier substrate is non-conductive and defines an optical layer.

14. (Original) The stack of claim 4, further comprising an optical layer deposited between the second and third layers.

15. (Original) The stack of claim 4, wherein the third layer comprises at least two sublayers, each sublayer alternating with the other, wherein each sublayer can be etched by the same release etchant, but has a different etch chemistry so that the sublayers define etch stops for each other.

16. (Currently amended) The stack of claim 15, wherein the third layer ~~includes~~ comprises a sublayer of molybdenum that alternates with a sublayer of silicon.

17. (New) A precursor film stack for use in the production of MEMS devices, the precursor film stack comprising:

a carrier substrate;

a first layer formed on the carrier substrate, the first layer comprising a plurality of sublayers, wherein at least one of the sublayers comprises a conductive material;

a second layer of an insulator material formed on the first layer; and

a third layer of a sacrificial material formed on the second layer.

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18. (New) The stack of claim 17, wherein the sublayer furthest from the carrier substrate is non-conductive and defines an optical layer.

19. (New) A precursor film stack for use in the production of MEMS devices, the precursor film stack comprising:

a carrier substrate;

a first layer formed on the carrier substrate;

a second layer comprising an insulator material formed on the first layer; and

a third layer comprising a sacrificial material formed on the second layer, wherein the third layer comprises at least two sublayers, each sublayer alternating with the other, wherein each sublayer is etched by the same release etchant, but has a different etch chemistry from the other, wherein the sublayers define etch stops for each other.

20. (New) The stack of claim 19, wherein the third layer comprises a sublayer of molybdenum that alternates with a sublayer of silicon.